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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

ONLUAKU, C	
ART UNIT	PAPER NUMBER

2615

DATE MAILED:

01/02/01

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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Office Action Summary

Application No.
08/939,442

Applicant(s)

Na et al

Examiner

Christopher Onuaku

Group Art Unit

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☒ Responsive to communication(s) filed on Oct 12, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-67 is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-12, 17-45, 48-50, and 53-67 is/are rejected.

☒ Claim(s) 13-16, 46, 47, 51, and 52 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/12/00 have been fully considered but they are not persuasive. Applicant argues that Yanagihara does not teach or suggest a receiver for generating a control command for transferring a program number of an intended program in a multiprogram MPEG transmission stream, and recording/reproducing device for receiving the control command and recording/reproducing the intended program of a received transport stream corresponding to the program number. Examiner disagrees. Yanagihara clearly discloses a receiving means (see the digital signal processor of Fig.1 which is a DVCR. Yanagihara discloses that a user specifies a desired transport stream (a command) from the control panel, the front end 1 which contains a tuner selects the program number of the desired transport from a transport stream containing a plurality of multiplexed programs. Yanagihara then uses this command from the user to select, process and record the desired transport stream with the associated program number. Yanagihara further discloses that the digital processor of Fig.1 can also output/receive MPEG video data, MPEG audio data and supplemental data to an external recording/playback device, such as a DVCR, via the digital interface 11(see claim 1 discussions).

The applicant argues that Yanagihara merely discloses modifying the PSI of the transport stream rather than generating a new control command. It is pertinent to point out that when a particular data or thing is modified, the result of such a modification, is a new data or thing. In

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any case, the claims 1,3,22,26 and 30 fail to include "new control command". The limitation "wherein the control command set is an audio/video control command" is a dependent claim, which Coutts clearly teaches. And Lett was cited for disclosing on-screen graphic generator.

Yanagihara, modified with Coutts and Lett, clearly discloses the claimed subject matter of claims 1-12&17-30 .

The rejections are, therefore, maintained.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

3. Claims 1,3,6-8,10-12,22-23,25-27,30-32,34-36,39-41,43-45,48-50,58,59,61-64&67 are rejected under 35 U.S.C. 102(e) as being anticipated by Yanagihara et al (US 5,899,578).

Regarding claim 1, Yanagihara et al disclose a device which receives and decodes digital broadcasts which includes processing performed when undecoded video data and audio data are input from an external recording/playback device, comprising:

a) the claimed input device (see Fig.1, and front panel 10; col.3, lines 36-44 to col.4, line 4);

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b) the claimed receiver and “first” digital interface (see the digital processor of Fig.1 referred to as Integrated Receiver Decoder (IRD) which includes digital interface 11; col.3, lines 32 to col.4, line 4; col.7, line 59 to col.10, line 36); and

c) the claimed recording/reproducing device including a “second” digital interface (see Fig.10,10A&10B, the digital interface 36; col.9, line 18 to col.10, line 19; col.10, lines 37-51).

Regarding claim 3, the claimed limitations of claim 3 are accommodated in the discussions of claim 1 above including the “first” and “second” digital interfaces (also see col.6., line 34 to col.7, line 12). Additionally see microcomputer 9 (the “first” signal processor) in col.5, line 34 to col.7, line 19); “second” signal processor (see signal processor computer 28, multiplexor 24 and demultiplexer 32; col. 10, 14-51). And discussions of how the digital signal processor processes PSI (see col.4, lines 48-53; and col.5, line 34 to col.7, line 18).

Regarding claim 6, Yanagihara discloses wherein the “first” digital interface generates the program number control command based on parsed PSI (see col.4, lines 48-53; and col.5, line 34 to col.7, line 18).

Regarding claim 7, Yanagihara discloses wherein the “first” and “second” digital interfaces are each an IEEE 1394 interface (see col.6, lines 63-65, and col.10, lines 14-19).

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Regarding claim 8, Yanagihara discloses wherein the “first” digital interface transfers the transport stream as isochronous packets during an isochronous transfer “mode”, and transfers the program number as asynchronous packets during an asynchronous transfer “mode” using “control command set”(see col.6, line 63 to col.7, line 12, and col.9, line 6 to col.10, line 51).

Regarding claim 10, Yanagihara discloses wherein the “first” digital interface transfers a multi-program transport stream isochronous packets in an isochronous transfer “mode” (see col.6, line 63 to col.7, line 4), and the “second” digital interface transfers a “single program” (packet) transport stream as isochronous packets in the isochronous transfer mode during a playback “mode” (see col.7, lines 5-12). Here the DVCR has a digital interface 36 (“second” digital interface) of Fig.10A.

Regarding claim 11, Yanagihara discloses wherein the “first” digital interface transfers a multi-program transport stream isochronous packets in an isochronous transfer “mode” (see col.6, line 63 to col.7, line 4), and the “second” digital interface transfers a “multi- program” transport stream as isochronous packets in the isochronous transfer mode during a playback “mode”. This is inherent in the digital interface of Yanagihara since both digital interface 11 of Fig.1 and digital interface 36 of the DVCR of Fig.10A have the same construction (see col.10, lines 20-24).

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Regarding claim 12, Yanagihara discloses wherein the “first” digital interface transfers a single program transport stream isochronous packets in an isochronous transfer “mode” (This is inherent in the digital interface of Yanagihara since both digital interface 11 of Fig.1 and digital interface 36 of the DVCR of Fig.10A 1 have the same construction (see col.10, lines 20-24). and the “second” digital interface transfers a “single program” transport stream as isochronous packets in the isochronous transfer mode during a playback “mode”(see col.7, lines 5-12). Here the DVCR has a digital interface 36 (“second” digital interface) of Fig.10A.

Regarding claim 22, the claimed limitations of claim 22 are accommodated in the discussions of claim 1 above.

Regarding claim 23, the claimed limitations of claim 23 are accommodated in the discussions of claim 3 above. Also, see col.4, lines 5-48).

Regarding claim 25, Yanagihara discloses the method comprising the steps of transferring a “command” for inquiring whether to permit the transfer of the program number of the program recorded in the recording medium, from the receiver to the recording/reproducing device, during a playback mode, and receiving the program number of the program recorded in the recording medium, from the recording/reproducing device (see col.4, lines 5-46; and col.6, lines 34-67).

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Regarding claim 26, Yanagihara discloses a method comprising the steps providing a program number of the intended program to be recorded, transferring a “command” for inquiring as to whether to permit the recording of the program, receiving a “response” for permitting the recording of the program from the recording device, transferring a “command” for performing the recording of the program corresponding to the program number provided in the steps above, and receiving a “response” for “notifying” of the permission of the recording of the program corresponding to the program number, from the recording device (see col.4, lines 5-46; col.5, line 54 to col.7, 58).

Regarding claim 27, the claimed limitations of claim 27 are accommodated in the discussions of claim 23 above.

Regarding claim 30, the claimed limitations of claim 30 are accommodated in the discussions of claim 26 above.

Regarding claims 31,32&34, the claimed limitations of claims 31,32&34 are accommodated in the discussions of claim 1 above.

Regarding claim 35, the claimed limitations of claim 35 are accommodated in the discussions of claim 3 above.

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Regarding claim 36, the claimed limitations of claim 36 are accommodated in the discussions of claim 1 above.

Regarding claim 39, the claimed limitations of claim 39 are accommodated in the discussions of claim 6 above.

Regarding claim 40, the claimed limitations of claim 40 are accommodated in the discussions of claim 7 above.

Regarding claim 41, the claimed limitations of claim 41 are accommodated in the discussions of claim 8 above.

Regarding claims 43&44, the claimed limitations of claims 43&44 are accommodated in the discussions of claim 10 above.

Regarding claim 45, the claimed limitations of claim 45 are accommodated in the discussions of claim 12 above.

Regarding claim 48, the claimed limitations of claim 48 are accommodated in the discussions of claim 3 above.

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Regarding claim 49, the claimed limitations of claim 49 are accommodated in the discussions of claim 12 above.

Regarding claim 50, the claimed limitations of claim 50 are accommodated in the discussions of claim 7 above.

Regarding claim 58, the claimed limitations of claim 58 are accommodated in the discussions of claim 22 above.

Regarding claim 59, the claimed limitations of claim 59 are accommodated in the discussions of claim 23 above.

Regarding claim 61, the claimed limitations of claim 61 are accommodated in the discussions of claim 25 above.

Regarding claims 62&63, the claimed limitations of claims 62&63 are accommodated in the discussions of claim 26 above.

Regarding claim 64, the claimed limitations of claim 64 are accommodated in the discussions of claim 27 above.

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Regarding claim 67, the claimed limitations of claim 67 are accommodated in the discussions of claim 30 above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2,4-5,9,33,37,38&42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagihara et al in view of Coutts (US 5,742,730).

Regarding claims 2&4, Yanagihara fails to disclose wherein the input device is a remote controller. Coutts teaches a control system for rapidly and accurately positioning consumer-type VCRs to arbitrarily selected tape positions comprising a remote control module 42 (see Fig.1; col.4, lines 50-53, and col.9, lines 43-53). A remote control device provides the desirable capability of controlling a device from a distance. It would have been obvious to modify Yanagihara by realizing Yanagihara with a remote controller, as taught by Coutts, which would provide the desirable capability of controlling the Yanagihara processor from a distance.

Regarding claim 5, the processor of Yanagihara, which is also a receiver, is connected to DVCR of Fig.10 of Yanagihara through a digital interface (see claim 1 discussion). With

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Yanagihara now modified with the remote controller of Coutts, Yanagihara would control the recording/reproducing devices of Yanagihara.

Regarding claim 9, Coutts further teach wherein the “control command set” is an “audio/video control command and transaction set” (AV/C CTS) (see col.9, lines 43-61).

Regarding claims 33&37, the claimed limitations of claims 33&37 are accommodated in the discussions of claim 2 above.

Regarding claim 38, the claimed limitations of claim 38 are accommodated in the discussions of claim 5 above.

Regarding claim 42, the claimed limitations of claim 42 are accommodated in the discussions of claim 9 above.

6. Claims 17-21,24,28,29,53-57,60,65&66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagihara et al in view of Lett et al (US 5,657,414).

Regarding claim 17, Yanagihara fails to explicitly disclose on-screen graphic (OSG) generator. Lett et al teach in Fig.2 on screen display control 127 which selectively generates on screen character and graphic displays in place of or overlaid on the video signal. The subscriber

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uses the on screen display features to determine a program event which the subscriber wishes to watch(see col.7, lines 23-34; col.11, lines 54-66;. It would have been obvious to one of ordinary skill in the art to modify Yanagihara by realizing Yanagihara with on-screen graphic generating means, as taught by Lett, in order, to facilitate, for example, the determination of the program event which the subscriber wishes to watch.

Regarding claim 18, Lett teaches wherein the on-screen graphic (OSG) generator “mixes” the “program guide information” with a graphic signal of a background screen to be provided to the OSG display (see col.7, line 23-34), here the examiner reads the video signal of col.7 line 27, as a “program guide information”.

Regarding claim 19, Lett teaches wherein the OSG generator “mixes” the program guide information with the decoded video signal to be provided to the OSG display (see col.7, lines 34-60).

Regarding claim 20, with Yanagihara now modified with Lett, Yanagihara now discloses wherein the “first” signal processor further comprises an on-screen display generator for displaying the program guide information of a transport stream being received on an OSD display (see claims 1,17&18 discussions).

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Regarding claim 21, the claimed limitations of claim 21 are accommodated in the discussions of claim 3, since the “second” signal processor of claim 3 extracts and records the extracted intended program, which is a “program guide information”.

Regarding claim 24, the claimed limitations of claim 24 are accommodated in the discussions of claim 17 above.

Regarding claims 28&29, the claimed limitations of claims 28&29 are accommodated in the discussions of claim 17 above.

Regarding claim 53, the claimed limitations of claim 53 are accommodated in the discussions of claim 17 above.

Regarding claim 54, the claimed limitations of claim 54 are accommodated in the discussions of claim 18 above.

Regarding claim 55, the claimed limitations of claim 55 are accommodated in the discussions of claim 19 above.

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Regarding claim 56, the claimed limitations of claim 56 are accommodated in the discussions of claim 20 above.

Regarding claim 57, the claimed limitations of claim 57 are accommodated in the discussions of claim 21 above.

Regarding claim 60, the claimed limitations of claim 60 are accommodated in the discussions of claim 24 above.

Regarding claim 65, the claimed limitations of claim 65 are accommodated in the discussions of claim 28 above.

Regarding claim 66, the claimed limitations of claim 66 are accommodated in the discussions of claim 29 above.

Allowable Subject Matter

7. Claims 13-16,46-47,51&52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

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Regarding claim 13, the prior art of record fails to show or fairly suggest a multi-media system comprising a first and second digital interfaces, each of which is an IEEE 1394 interface where the multimedia system further comprises wherein the first digital interface comprises a first microcomputer including a transaction layer and a serial bus management layer, as software, for generating a program number control command based on a program number received from the input device, using a write transaction and a read transaction, a first link layer for adding an asynchronous header to the program number command received from the first microcomputer to convert the program number command into serial data, and a first physical layer for converting the serial data into an electrical signal.

Regarding claim 46, the prior art of record fails to show or fairly suggest a digital Audio/video device having a receiver for receiving a transport stream comprising a signal processor, a digital interface, an input device, the receiver is connected to at least one recording/reproducing device using the digital interface and the receiver and the recording/reproducing device are controlled by the input device, where the A/V device further comprises wherein the digital interface comprises a first microcomputer including a transaction layer and a serial bus management layer, as software, for generating the control command based on the program number input via the input device, using a write transaction and a read transaction, a first link layer for adding an asynchronous header to the control command

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generated by the first microcomputer to convert the control command into serial data, and a first physical layer for converting the control command serial data into an electrical signal.

Regarding claim 51, the prior art of record fails to show or fairly suggest a digital audio/video recording/reproducing device for recording/reproducing a transport stream transferred from a digital A/V device, the recording/reproducing device comprising a digital interfaces, and a signal processor, and the digital interface comprises an IEEE 1394 interface where the digital A/V recording/reproducing device further comprises wherein the digital interface comprises a second physical layer for converting the program number command electrical signal, transferred from the first physical layer, into digital data, a second link layer for converting the program number command digital data into parallel data, and for removing the asynchronous header, and a second microcomputer including a transaction layer and a serial bus management layer, as software, for recording the program number on a predetermined region of a recording medium by recognizing the program number command during a recording mode, and for reading out the program number recorded in the predetermined region during a playback mode

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

10.. Any inquiry concerning this communication or earlier communications from this examiner should be directed to Christopher Onuaku whose telephone number is (703) 308-7555. The examiner can normally be reached on Tuesday to Thursday from 7:30 am to 5:00 pm. The examiner can also be reached on alternate Monday.

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Wendy Garber, can be reached on (703) 305-4929.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308-6306 and (703) 308-6296, (for formal communications intended for entry)

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Or:

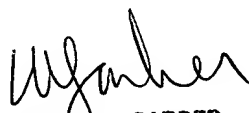
(703) 308-6306 and (703) 308-6296 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be direct to the Group receptionist whose telephone is (703) 305-4700.


COO

12/22/00


WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600